1	2	3	4
6.	Urjagram (Surveys)	1 00	
7.	Biomass Development Programme	15 00@	
8.	Human and Animal Energy Programme	1.00	
9.	Bioenergy Development Programme	20.00	300 MW*
10.	Small Hydel Power Development Programme	100.00	200 MW*
11	Alternate Fuels for Surface Transportation	10.00	
12	Magneto Hydro Dynamics	10.00	
13.	Geo-thermal Energy		
14.	Chemical Sources of Energy		
15.	Ocean Energy		
16.	Hydrogen Energy		
17.	Indian Renewable Energy Development Agency Ltd.	10.00	
18.	Regional Offices etc.	10.00	
19.	Information & Publicity		
20.	Seminars/Conferences		
21.	International Cooperation		
22.	Data Bank/TIFAC		
23.	Solar Energy Centre	15.00	
24.	Special Area Programmes & Demonstration Activities	5.00	
	TOTAL:	857.00	

©Includes Biomass Gasifiers; * Includes Private Sector.

Generation and distribution of Solar and wind energy during Eighth Five Year Flan

1295. SHRI KAMAL MORARKA : Will the PRIME MINISTER be pleased to state :

(a) whether any target has been fixed for the generation and distribution of solar and wind energy during the Eighth Five Year Plan;

(b) If so, the details thereof and the achievements made so far;

(c) whether any new strategy has been evolved to harness energy for power generation from non-conventional sources; and

(d) if so, the details thereof ?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES WITH ADDITIONAL CHARGE OF THE MINISTER OF STATE OF THE MINISTRY OF AGRICULTURE (SHRI S. KRISHNA KUMAR) : (a) During the Eighth Plan period, installation of 100 MW of solar photovoltaic systems, 2.75 lakh sq. metres of solar thermal based devices and three lakh solar cookers is envisaged.

(b) Ministry of Non-Conventional Energy Sources is implementing a countrywide demonstration and extension programme for the utilisation of solar and wind energy through various applications such as solar lights, solar pumps, solar power plants, solar water heaters, solar cookers and wind electric generators. Over 42,000 solar photovoltaic systems, 25,000 solar thermal systems, 2.27 lakh solar cookers and 45 MW wind electric generators have been deployed in the country so far.

(c) and (d) Goernment is encouraging power generation from non-conventional energy sources such as solar, wind and small hydro power through a mix of policy measures and fiscal incentives. Fuidelines have been issued by some states to facilitate generation of power with involvement of private sector and feeding it into the existing grids and for wheeling and banking of power. Efforts are being made to institute similar arrangements in other states and to ensure a remunerative price for the power produced. The fiscal incentives available include loans at concessional rates of interest through the Indian -Renewable Energy Development Agency; accelerated depreciation; exemption from central excise duty; relief in sales tax, and concessional rate of customs duty on materials and equipment. Additional financial resources are being mobilised through 'World Bank and bilateral assistance.

Evaluation of NPIC

1296. SHRI KRISHNA KUMAR BIRLA : Will the PRIME MINISTER be pleased to state :

(a) when was the National Programme of Improved Chullaha (NPIC) initialed in the country stating the names of the States in which the programme was initiated;

(b) what are the basic objectives of the programme;

(c) what was the annual target, if any, for the improved chullahs and what has been the actual achievement during the last three years;

(d) what, according to the evaluation, if any, is the impact of the NPIC programme stating the names of the States where an evaluation has been made; and

(e) what are the future plans, of Government, if any, in this regard ?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES WITH ADDITIONAL CHARGE OF THE MINISTER OF STATE OF THE MINISTRY OF AGRICLTURE (SHRI S. KRISHNA KUMAR) : (a) NPIC was launched in December, 1983, in all the States and Union Ttrritories of this country.

(b) The basic objectives of the programme are; fuel conservation, afforestation, environmental upgradation, removal/reduc-ion of smoke in the kitchen and mitigating the drudgery of womenfolk in cooking and collection of fuelwood.

(c) The year-wise target and actual achievement figures of improved chullahs under the National Programme on Improved chullanas is as under :—

Year	Target (in lakhs)	Achievements (in lakhs)
1989—90 . .	18.00	21.99
1990—91 . .	16.72	19.87
1991—92 . .	19.87	21.52

(d) Evaluation of study of NPIC has been entrusted to National Council of Applied Economic Research, New Delhi. Final Report of their findings has not yet been received. However, a brief about their findings as per their preliminary study report made available to this Ministry, is given in the Statement. *(See* below).

(e) The Government is proposing to have higher target during the ensuing financial years so that at the end of the VIII Five Year Plan 25% of the potential beneficiaries (about 30 million in number) are covered under this programme.

Statement

The findings of the National Council of Applied Economic Research, as reported *in*